BASIS OF CLAIM

1. On April 10, 2018, George Nelson Shaw, Sr., a patient at the Louis A. Johnson VA Medical Center in Clarksburg, West Virginia (hereinafter referred to as "VA Medical Center") died as a result of the VA Medical Center breaching its affirmative duty to keep him safe when he was foreseeably injected with a fatal dose of insulin, either negligently or willfully, by an unidentified person while he was an admitted patient of the VA Medical Center.

2. Mr. Shaw was a decorated Retired Senior Master Sergeant with the United States Air Force. He had a distinguished 28 year military career in the United States Air Force. After his retirement, he was employed at the Louis A. Johnson VA Medical Center for 8 years. He was married to his loving wife of 59 years, Norma Lynch Shaw. The two had three children: son George Shaw, Jr. (who served 20+ years in the Air Force), and daughters Linda Kay Shaw (who served 22 years in the Air Force) and Mary Shaw Wood. Ret. SMSgt. Shaw has 2 grandchildren with service in the Air Force and Army. In addition, Ret. SMSgt. Shaw had 3 brothers who served

3. Ret. SMSgt. Shaw was admitted to the Louis A. Johnson VA Medical Center in Clarksburg on March 22, 2018. Ret. SMSgt. Shaw came to the facility that day because he was not feeling well and wanted to be checked out. He was examined and subsequently admitted. Ret. SMSgt. Shaw's health was improving over the next couple days.

4. Then, on March 26, 2018, Ret. SMSgt. Shaw experienced an episode of hypoglycemia (very low level of blood sugar) in which his glucose levels ranged from 17-40 mg/dL between 7:22 a.m. and 9:53 a.m. Low blood sugar is also called hypoglycemia. Ret. SMSgt. Shaw's severely low blood sugar level was so low, that medical efforts to raise his blood sugar level back to normal were unsuccessful. His condition significantly deteriorated and his

family repeatedly asked why his health condition was declining so rapidly. On March 28, 2018, Ret. SMSgt. Shaw was summarily discharged from the VA Medical Center and sent to River Oaks nursing home. On April 4, 2018, River Oak's sent him back to the VA Medical Center and he was readmitted that day. On April 5, 2018, Ret. SMSgt. Shaw was placed on comfort care measures at the VA Medical Center. SMSgt. Shaw died a very painful death from severe hypoglycemia at roughly 8:23 a.m. on the morning of April 10, 2018. Employees of the VA Medical Center never explained to Ret. SMSgt. Shaw's family the unexplained diagnosis of hypoglycemia. Ret. SMSgt. Shaw's family requested an autopsy, which was done on April 11, 2018, at the VA Medical Center. The cause of death from this autopsy was determined to be congestive heart failure. Ret. SMSgt. Shaw's family had his body sent to a Dorsey Funeral Home and prepared for burial. Ret. SMSgt. Shaw was buried on April 16, 2018, at Floral Hills Memorial Gardens in Mount Clare, WV.

5. Ret. SMSgt. Shaw did not suffer from diabetes and had never been diagnosed with diabetes. Ret. SMSgt. Shaw did not have a history of ever taking oral medication or insulin injections for diabetes. There was not medical need for Ret. SMSgt. Shaw to receive or take insulin and there were no physician orders for insulin during Ret. SMSgt. Shaw's hospitalization at the VA Medical Center.

6. At the time of Ret. SMSgt. Shaw's death, nobody at the VA Medical Center told his family about the sudden and unexplained hypoglycemia that caused his death. Moreover, the family members were not told that, prior to Ret. SMSgt. Shaw's death, 9 or 10 other patients at the VA Medical Center had suffered similar unexplained deaths due to sudden onset of unexplained medical conditions. It was not until months later that VA investigators and the FBI contacted Ret. SMSgt. Shaw's wife, Norma Shaw, and advised her of the earlier deaths and their

belief that her husband's death was not a result of natural causes. During its investigation, VA investigators and the FBI advised Norma Shaw that there was evidence that 9 or 10 other patients of the VA Medical Center had been wrongfully injected with insulin, thereby causing their deaths. Mrs. Shaw was further advised that her husband was one of the last known victims.

7. Under the jurisdiction of the VA Office of the Inspector General, Ret. SMSgt. Shaw's remains were disinterred and sent to Dover Air Force Base for a second autopsy because of the suspicious manner of Ret. SMSgt. Shaw's death.

8. The autopsy confirmed investigators' suspicions that Ret. SMSgt. Shaw had received unprescribed exogenous insulin injections in four areas of his body. That finding was consistent with the clinical history of a profound hypoglycemic event that occurred the morning of March 26, 2018. The autopsy report confirmed that Ret. SMSgt. Shaw was not a diabetic and had no history of oral hypoglycemic use or previous insulin administration. The autopsy report also confirmed there were no hospital orders for the administration of insulin. The autopsy report noted that Ret. SMSgt. Shaw never returned to his clinical baseline after he was negligently, wrongfully, or intentionally injected with insulin. The autopsy report further noted that the hypoglycemic event was the precipitating event for his terminal clinical decline.

9. As a result of the investigation, the Armed Forces Medical Examiner ruled that the manner of Ret. SMSgt. Shaw's death is homicide. If the medical examiner's conclusion is correct, Ret. SMSgt. Shaw was murdered while he was in the care and custody of the Louis A. Johnson Veteran's Administration Medical Center despite the VA Medical Center being on notice of the previous wrongful injections. Ret. SMSgt. Shaw's family has been advised that the VA investigators and the FBI have a person of interest in the death of Ret. SMSgt. Shaw and the deaths of the multiple VA Medical Center patients. As of the submission of this claim form, that

person's identity has not been shared with Ret. SMSgt. Shaw's family.

10. Regardless of the relationship of the unidentified person to the VA Medical Center, if any, the VA Medical Center still had an independent duty to protect its patients, including Ret. SMSgt. Shaw, from foreseeable harm once it knew or should have known that its patients were being wrongfully injected with insulin. The VA Medical Center breached its independent and affirmative duty to protect Ret. SMSgt. Shaw from foreseeable harm, and as a direct and proximate result of that breach, Ret. SMSgt. Shaw died. Additionally, if the unidentified person who injected Ret. SMSgt. Shaw with insulin was an employee, and if this person injected Ret. SMSgt. Shaw willfully with insulin with an intent to harm him, this act was not committed within the scope of her/his employment with the VA Medical Center. If the insulin was injected into Ret. SMSgt. Shaw negligently, then the VA Medical Center is also responsible because the negligence of its employee is imparted onto the VA Medical Center.

11. Upon information and belief, before April 10, 2018, approximately 10 patients of the VA Medical Center in Clarksburg died as a result of unexplained severe hypoglycemia. The employees of the VA Medical Center were aware of each of the unexpected and suspicious deaths. Each of these approximately 10 patients had received a large and wrongful injection of insulin that was neither ordered by a doctor nor medically necessary. The employees of the VA Medical Center either knew, or should have known, of the wrongful insulin injections to each of the approximately 10 patients who died as a result of wrongful insulin injections. Accordingly, when Ret. SMSgt. Shaw was admitted to the VA Medical Center, there was a reasonable foreseeable risk of harm that more VA Medical Center patients would become victims of the wrongful injections unless the VA Medical Center took affirmative action to protect the VA Medical Center's patients from such foreseeable and wrongful conduct.

12. The VA Medical Center had a special relationship with its veteran patients that created an affirmative duty to protect those patients from reasonably foreseeable harm. The VA Medical Center had an affirmative duty to ensure that Ret. SMSgt. Shaw received high-quality and timely healthcare services in compliance with the standard of care. In this case, the VA Medical Center took custody of Ret. SMSgt. Shaw, who suffered from dementia, and the VA Medical Center had an affirmative duty to keep him safe. Therefore, there is undoubtedly a special relationship between the VA Medical Center and Ret. SMSgt. Shaw under the facts of this case. Under West Virginia Law, foreseeability is the "primary factor" in determining whether a duty exists. *Robertson v. LeMaster*, 301 S.E.2d 563 (1983). The "ultimate test of the existence of a duty to use care is found in the foreseeability that harm may result if it is not exercised." Syl. Pt. 8, *Aikens v. Debow*, 541 S.E.2d 579 (2000)(citing Syl. Pt.3, *Sewell v. Gregory*, 371 S.E.2d 82 (1988)). West Virginia law also requires caregivers, like the VA Medical Center, who accept responsibility for the care of incapacitated elderly people, to protect them from harm.

13. Several other (possibly up to ten) VA Medical Center patients inexplicably died before Ret. SMSgt. Shaw became a similar fatality victim. These prior deaths created an antecedent, independent and affirmative duty to act to protect Ret. SMSgt. Shaw and other VA Medical Center patients from foreseeable harm before Ret. SMSgt. Shaw was also wrongfully injected with insulin and killed. The VA Medical Center breached this affirmative duty and was negligent in multiple ways:

a. by failing to thoroughly investigate each of these suspicious deaths and discover the cause of those deaths which resulted from the unwarranted injection of insulin by the unidentified person;
b. by failing to alert Ret. SMSgt. Shaw or his family that multiple other VA Medical Center patients at the Louis A. Johnson Veteran's Administration Medical Center

had died suspiciously ;

c. by failing to adequately staff its medical center;
d. by failing to designate each of the other 10 deaths as sentinel events despite each of those deaths meeting the criteria to be designated as a sentinel event, and by failing to identify, report and investigate each sentinel event as required by the standard of care;
e. by failing to initiate a root cause analysis after each of the 10 deaths in order to prevent additional deaths and reduce the potential for patient harm;
f. by failing to have proper reconciliation of medications, including insulin;
g. by failing to have proper oversight by senior VA Medical Center management staff;
h. by failing to properly train VA Medical Center staff; and
i. And by failing to warn Ret. SMSgt. Shaw and his family of other deaths.

14. If the VA Medical Center had properly warned Ret. SMSgt. Shaw or his family, they could have made an informed choice about whether to seek care at that facility. Due to the negligent concealment of those other suspicious deaths and information, neither Ret. SMSgt. Shaw nor his family had an opportunity to choose. Moreover, had the VA Medical Center not acted negligently as described above, Ret. SMSgt. Shaw's untimely death would have been prevented.

15. The VA Medical Center had a duty to provide reasonable and competent medical care to its patients, including Ret. SMSgt. Shaw. He had an absolute right to be free from abuse by the staff at the VA Medical Center. The VA Medical Center had a duty to protect and prevent its patients, including Ret. SMSgt. Shaw, from being administered drugs and injections that were not medically necessary. The VA Medical Center had a duty to properly screen and hire its employees. The VA Medical Center had a duty to thoroughly investigate the cause of suspicious and unexpected deaths in order to prevent additional patients, including Ret. SMSgt. Shaw, from being exposed to the unreasonable risk of being injected with medications meant to harm them. The VA Medical Center had a duty to warn patients of the multiple, suspicious and unexpected

deaths so that new patients, including Ret. SMSgt. Shaw, could make an informed decision about whether to seek care at that facility. The VA Medical Center had a duty not to conceal from patients the multiple, suspicious and unexpected deaths so that new patients, such as Ret. SMSgt. Shaw, could make an informed decision about whether to seek care at that facility. The VA Medical Center had a duty to keep good control of its medications and inventory, including injectable insulin, so that employees of the VA Medical Center did not have unaccounted for access to medications and injections that could be misused or abused. The VA Medical Center had a duty to properly supervise its employees and not to retain employees that were a danger to patients. Each of these affirmative duties of the VA Medical Center were antecedent and independent of the conduct of the person who wrongfully injected Ret. SMSgt. Shaw.

16. The VA Medical Center breached each of the above listed duties, which breaches were deviations from the appropriate standard of medical care and were a proximate cause of Ret. SMSgt. Shaw's injuries and death. As a result of those deviations from the appropriate standard of care, Ret. SMSgt. Shaw was exposed to unnecessary, foreseeable and preventable dangers, and it was those deviations by the VA Medical Center that were a proximate cause of his injuries and death. In addition, if the employee of the Louis A. Johnson VA Medical Center who wrongfully injected Ret. SMSgt. Shaw with insulin did so negligently, then such negligence is also deviation from the appropriate standard, and the VA Medical Center is responsible for the negligence of its employees under *respondeat superior*.

17. As a direct and proximate result of deviations from the appropriate standards of medical care described herein which caused Ret. SMSgt. Shaw's injuries and wrongful death, his statutory beneficiaries are entitled to all non-economic and economic damages allowed under West Virginia law, including sorrow, mental anguish, and solace which may include society,

companionship, comfort, guidance, kindly offices and advice of the decedent, pain and suffering, mental anguish, funeral costs of $6,561.47 and loss of income of to Ret. SMSgt. Shaw's Estate of $3,904.29 per month throughout the remainder of his natural life.

In support of this Claim, please see the attached documentation:

a. Death Certificate of George Nelson Shaw.

b. Autopsy Report of George Nelson Shaw dated from the United States Department of Defense's Armed Forces Medical Examiner System.

c. Funeral bill for the funeral of George Nelson Shaw.

Armed Forces Medical
Examiner System

DEFENSE HEALTH AGENCY
115 PURPLE HEART DRIVE
DOVER AIR FORCE BASE, DELAWARE 19902

AUTOPSY REPORT

Autopsy Number: ME19-0013
Name: Shaw, George Nelson
Grade: Retiree
Date of Birth: 18 October 1936
Date of Death: 10 April 2018
Place of Death: Louis A. Johnson VA Medical Center, Clarksburg, WV
Date/Time of Autopsy: 16 January 2019 @ 0730
Place of Autopsy: Dover AFB, DE
Date Report Signed: 3 July 2019

Circumstances of Death: By report, this 81 year-old Retiree was admitted on 22 March 2018 for an acute exacerbation of congestive heart failure. On 26 March 2018, he experienced an episode of hypoglycemia in which his glucose levels ranged from 17-40 mg/dL between 7:22 am and 9:53 am. After the hypoglycemic event, he never returned to his clinical baseline and his clinical course continued to deteriorate. He was discharged to a nursing home for hospice care on 28 March 2018, but was readmitted to the hospital on 4 April 2018 for combativeness, poor oral intake, and dehydration. He was placed on comfort care measures on 5 April 2018 and he died on 10 April 2018. An autopsy was performed by the VA hospital on 11 April 2018 as requested by the family. The cause of death was determined to be congestive heart failure with coronary atherosclerosis. Under authorization of the VA Office of the Inspector General, the remains were disinterred and brought to Dover AFB for a second autopsy.

Authorization for Autopsy: Armed Forces Medical Examiner, IAW 10 USC 1471.

Identification: Positive identification by ante-mortem and post-mortem fingerprint comparisons.

Cutide

CAUSE OF DEATH: **Exogenous insulin administration.**

OTHER CONTRIBUTING FACTORS: Congestive heart failure, atherosclerotic cardiovascular disease, dementia, chronic renal disease.

MANNER OF DEATH: **Homicide.**

EXTERNAL EXAMINATION

The body is received in a casket. Five desiccated flowers are received with the casket. The previously embalmed and autopsied body is clad in the clothing listed below. An AFMES tag labeled with the deceased's demographic information is attached to the left ankle.

The body is that of a well-developed, well-nourished, previously autopsied and embalmed male and appears compatible with the reported age. The body is approximately 73 inches in length and weighs 111 pounds. Injuries are described in the section "Evidence of Injury" and medical therapy is described in the section "Medical Intervention." Rigor and lividity are unable to be assessed. There is diffuse gray-brown skin discoloration of the torso and lower extremities with skin slippage.

The scalp hair is brown-gray and measures up to 4 1/2 inches in length. The face is clean shaven. Eye covers are covering the flattened optic globes. The irides appear blue. The corneae are cloudy. The conjunctivae are pale and without petechiae. The sclerae are white and without petechiae. The ears are normally formed and set. The external auditory canals are clear and both earlobes are not pierced. The nasal skeleton and maxilla are palpably intact. The mandible is wired closed. The external nares and mouth are free of abnormal secretions. The lips are without evident injury. The teeth are absent and dentures are in place. See "Medical Intervention" for description of the anterior torso. The abdomen is flat. The posterior torso is unremarkable. The genitalia are those of an adult male. The anus and perineum are unremarkable. The extremities show no evidence of fractures or lacerations. The fingernails are intact. No scars or tattoos are noted.

CLOTHING AND PERSONAL EFFECTS

At the time of autopsy, the body is clad in an Air Force coat with nameplate and ribbon rack, white shirt, blue shirt, blue tie, white underwear, blue Air Force pants, and socks. Received in the casket is a white blanket, Air Force dress cover, and 8 miscellaneous papers and drawings.

MEDICAL INTERVENTION

There is evidence of previous autopsy including sutured incision of the skull, previous removal of the skull cap, vertically oriented midline sutured incision of the neck, "Y-shaped" sutured incision of the anterior torso, previous removal of the chest plate, vertically oriented 3 inch sutured incision on the right upper abdomen, and removal of the brain and viscera of the torso. The thoracic and peritoneal cavities contain cotton-like and granular packing material and a plastic bag with a zipper. The intracranial cavity contains cotton-like and granular packing material.

RADIOGRAPHS

Postmortem radiographs are obtained and show no radiographic evidence of acute traumatic injury. Artifacts of previous autopsy and embalming are identified. The mandible is wired closed. There is extensive peripheral calcific atherosclerosis of the femoral arteries and distal branches.

EVIDENCE OF INJURY

A 1/2 inch contusion is on the left side of the forehead. See "Musculoskeletal System."

INTERNAL EXAMINATION

BODY CAVITIES:

See "Medical Intervention." The body is opened by the usual thoracoabdominal incision and the chest plate is removed. The ribs, sternum, and vertebral bodies are visibly and palpably intact.

HEAD (CENTRAL NERVOUS SYSTEM) and NECK:

See "Medical Intervention" and "Neuropathology Consultation."

CARDIOVASCULAR SYSTEM:

See "Re-associated remains."

RESPIRATORY SYSTEM:

See "Re-associated remains."

HEPATOBILIARY SYSTEM:

See "Re-associated remains."

GASTROINTESTINAL SYSTEM:

See "Re-associated remains."

GENITOURINARY SYSTEM:

See "Re-associated remains."

LYMPHORETICULAR SYSTEM:

See "Re-associated remains."

ENDOCRINE SYSTEM:

See "Re-associated remains."

MUSCULOSKELETAL SYSTEM:

See "Medical Intervention." Superficial skin and soft tissue dissection of the abdomen, buttocks, arms, and thighs demonstrate the followed:

- Grossly unremarkable skin and soft tissue are representatively sampled from the right buttock (represented in microscopic slide 23).
- A 0.6 x 0.5 centimeter area of discoloration in the superficial adipose tissue of the lateral right arm (represented in microscopic slide 24). No overlying cutaneous ecchymosis is present.
- A 1.5 x 1 centimeter area of intramuscular discoloration in the lateral left arm (represented in microscopic slide 25). No overlying cutaneous ecchymosis is present.
- A 1.5 x 0.8 centimeter area of discoloration in the subcutaneous tissue of the left side of the abdomen (represented in microscopic slide 26). No overlying cutaneous ecchymosis is present.

- A 2.5 x 0.8 centimeter area of discoloration in the subcutaneous tissue of the left side of the abdomen adjacent to the midline (represented in microscopic slide 27). No overlying cutaneous ecchymosis is present.
- Grossly normal skin and subcutaneous tissue are sampled from the right anterior thigh (represented in microscopic slide 28).
- A 2 x 2 inch area of cutaneous ecchymosis and subcutaneous hemorrhage in the left antecubital fossa (represented in microscopic slide 29).
- A 3 x 3 centimeter area of cutaneous ecchymosis and associated subcutaneous hemorrhage on the anterior aspect of the left forearm (represented in microscopic slide 30).

NEUROPATHOLOGY CONSULTATION

See Joint Pathology Center Consultation report (JPC accession number 4116272-00).
Diagnosis: AU 18 4 Brain, autopsy examination:

1. Alzheimer Disease Neuropathologic Change: A3, B3, C3 (National Institute on Aging- Alzheimer's Association, 2012).
2. Cerebral amyloid angiopathy, slight.
3. Lewy body disease, neocortical (diffuse).
4. Scattered TDP-43-positive neuronal cytoplasmic inclusions identified in hippocampal formation and amygdala.
5. Intracranial atherosclerosis, slight; intracerebral arteriolosclerosis, slight.

RE-ASSOCIATED REMAINS

Received separately from the body and casket are two evidence envelopes and three evidence boxes with appropriate chain of custody evidence vouchers associating these with the previous autopsy "AU 18 4" on George Shaw. One evidence envelope contains 22 histology slides labeled "AU 18 4, slide 1-22". The second evidence envelope contains 22 corresponding tissue blocks.

The first evidence box contains a foam cooler containing a white plastic bucket labeled #1 containing four individually labeled sealed bags (#1-4) containing formalin fixed tissue. The second evidence box contains a foam cooler containing a white plastic bucket labeled #2 and containing three individually labeled sealed bags (#5-7) containing formalin fixed tissue. The third evidence box contains a foam cooler containing a white plastic bucket labeled #3 and containing four individually labeled sealed bags (#8-11) containing formalin fixed tissue. The labeled bags contain the following formalin fixed tissues:

Heart #1: Eight sections of heart tissue weighing 540 grams in aggregate. The heart tissue demonstrates a smooth epicardial surface. The coronary arteries are present in a normal distribution and demonstrate marked calcific atherosclerosis of the proximal left anterior descending coronary artery (approximately 90% narrowed) and right coronary artery (approximately 90% narrowed). The myocardium is firm with a 5 x 0.6 centimeter area of darkened parenchyma along the posterior wall of the left ventricle. The valve leaflets are thin and mobile. The walls of the left ventricle, interventricular septum, and right ventricle measure 1.4, 1.4, and 0.7 centimeters thick, respectively. The endocardium is smooth and glistening.

Liver #2: Two sections of passively congested liver parenchyma measuring 140 grams in aggregate.

Gallbladder #3: A previously opened gallbladder weighing 20 grams with a tan-yellow surface and green velvety mucosal surface.

Bladder/prostate #4: A 100 gram portion of bladder with a tan, smooth mucosa surface; a 20 gram portion of nodular prostate gland tissue.

Lung/trachea/thyroid #5: A 20 gram portion of trachea including the bifurcation into the right and left main bronchus, a 20 gram portion of grossly unremarkable thyroid tissue; three sections of grossly unremarkable lung tissue weighing 160 grams in aggregate.

Pancreas/spleen #6: Two fragments of grossly unremarkable spleen weighing 20 grams in aggregate; three fragments of autolyzed pancreatic tissue weighing 80 grams in aggregate.

Large intestine/small intestine/appendix #7: One fragment of large bowel with several diverticuli measuring up to 0.6 centimeters and weighing 100 grams; two fragments of grossly unremarkable small bowel weighing 20 grams in aggregate; two fragments of grossly unremarkable appendix weighing less than 10 grams in aggregate.

Aorta #8: Two fragments of aortic tissue with marked calcific atherosclerosis and weighing 120 grams in aggregate.

Kidney #9: Eleven fragments of kidney with gross cortical nephrosclerosis and mild dilation of the renal pelves; weighing 100 grams in aggregate.

Esophagus/stomach #10: Fragment of grossly unremarkable esophagus, gastroesophageal junction, and stomach weighing 60 grams.

Miscellaneous tissue #11: Multiple fragments of miscellaneous formalin fixed tissues measuring 15 x 12 x 3 centimeters in aggregate dimension and weighing 100 grams in aggregate.

MICROSCOPIC EXAMINATION

Tissue blocks 1-22 received as evidence are recut at AFMES, and the original tissue blocks are returned as evidence. See Louis A. Johnson VAMC autopsy report AU 18 4 for correlation. Selected portions of skin/soft tissue and the examined retained organ tissue are retained in formalin with the preparation of slides (blocks 23-32). Immunohistochemical stains are examined with appropriately staining positive and negative internal controls.

Slide 1 (thyroid/trachea): section of the trachea shows mild acute and chronic inflammation. Section of the thyroid shows foci of lymphocytic thyroiditis.

Slide 2 (right lung/bronchus) and slide 3 (left lung/bronchus): sections show mild acute and chronic inflammation, emphysematous changes, and pigmented macrophages consistent with respiratory bronchiolitis.

Slide 4 (liver/gallbladder): section of the liver shows passive congestion with mild periportal inflammation and fibrosis. Section of the gallbladder shows autolyzed mucosa.

Slide 5 (right kidney) and slide 6 (left kidney): sections show interstitial fibrosis, glomerulosclerosis, hyaline arteriolosclerosis, and patchy interstitial nephritis. There is duplication of the internal elastic lamina of the arterioles.

Slide 7 (adrenal glands): sections show partial autolysis.

Slide 8 (aorta): section shows calcific atherosclerosis.

Slide 9 (spleen): section shows congestion and partial autolysis.

Slide 10 (pancreas), slide 22 and slide 32 (additional pancreas): sections show partial autolysis with appropriate immunohistochemical staining for insulin.

Slide 11 (esophagus/stomach): section of the esophagus shows unremarkable squamous epithelium. Section of the stomach shows autolyzed gastric mucosa.

Slide 12 (small bowel, large bowel, and appendix): sections show unremarkable bowel and appendix with partially autolyzed mucosa.

Slide 13 (prostate/bladder) and slide 21 (additional prostate tissue yellowish areas): sections of the prostate show benign prostatic hyperplasia. Section of the bladder show unremarkable muscularis with partially autolyzed mucosa.

Slide 14 (right atrium/pulmonic valve), slide 15 (right ventricle), slide 16 (cardiac septum), slide 17 (left atrium), and slide 18 (left ventricle), and slide 31 (posterior left ventricle, heart): sections of the heart show myocyte hypertrophy with patchy perivascular and interstitial fibrosis.

Slide 19 (left anterior descending coronary artery) and slide 20 (right coronary artery): sections show marked calcific atherosclerosis.

Slide 23 (skin/soft tissue, right buttock): section shows partially autolyzed skin without underlying hemorrhage within the subcutaneous fibroadipose tissue. Hematoidin pigment is identified. No definitive immunohistochemical staining for insulin or associated polarizable crystals are identified.

Slide 24 (skin/soft tissue, lateral right arm): section shows partially autolyzed skin with underlying hemorrhage within the subcutaneous fibroadipose tissue. Immunohistochemical staining for insulin is positive in predominantly a perimembranous pattern of the subcutaneous adipocytes. Fine polarizable crystalline material is present in the areas of insulin positivity.

Slide 25 (skin/soft tissue, lateral left arm): section shows partially autolyzed skin without underlying hemorrhage within the subcutaneous fibroadipose tissue. Immunohistochemical staining for insulin is positive predominantly between the myofibrils. Fine polarizable crystalline material is present in the areas of insulin positivity.

Slide 26 (skin/soft tissue, left abdomen): section shows partially autolyzed skin without underlying hemorrhage within the subcutaneous fibroadipose tissue. No definitive iummunohistochemical staining for insulin is identified. Large chunky polarizable crystals are identified.

Slide 27 (skin/soft tissue, left medial abdomen): section shows partially autolyzed skin without underlying hemorrhage within the subcutaneous fibroadipose tissue. No definitive iummunohistochemical staining for insulin is identified. Large chunky polarizible crystals are identified. Interpretation is limited by poor sectioning.

Slide 28 (skin/soft tissue, right anterior thigh): section shows partially autolyzed skin without underlying hemorrhage within the subcutaneous fibroadipose tissue. Immunohistochemical staining for insulin is positive predominantly between the myofibrils. Polarization demonstrates fine polarizable crystalline material in the areas of insulin positivity.

Slide 29 (skin/soft tissue, left antecubital fossa): section shows partially autolyzed skin with underlying hemorrhage within the subcutaneous fibroadipose tissue. No definitive iummunohistochemical staining for insulin or associated polarizable crystals are identified.

Slide 30 (skin/soft tissue, left anterior forearm): section shows partially autolyzed skin with underlying hemorrhage within the subcutaneous fibroadipose tissue. Immunohistochemical staining for insulin is positive predominantly between the myofibrils with associated fine polarizable crystalline material upon polarization.

ADDITIONAL REMARKS

1. Documentary photographs are taken by an AFMES Mortuary Affairs Specialist (92M). Representatives from VA OIG attended the autopsy. A complete list of all individuals in attendance is on file.
2. Selected portions of skin/subcutaneous tissue and organs are retained for toxicology and/or DNA identification.
3. Personal effects and organ tissue received as evidence are released with the body. The tissue blocks received as evidence are recut at AFMES, and returned with the received slides to the Investigative Agents in attendance.
4. No evidence is recovered at autopsy.

FINAL AUTOPSY DIAGNOSES

I. Evidence of exogenous insulin administration:

A. Four subcutaneous areas (lateral right arm, lateral left arm, left anterior forearm, and right anterior thigh) with immunohistochemically positive for insulin and corresponding fine polarizable crystal formation.
B. Hypoglycemic event on 26 March 2018 with glucose levels of 17-40 mg/dL with subsequent significant decline in clinical condition.
C. No medical history of diabetes or prescribed insulin administration.

II. Previous autopsy findings (see Louis A. Johnson VAMC report AU 18 4):

A. Cardiomegaly (662 grams) with biventricular hypertrophy and biatrial hypertrophy with atrial dilation; clinical history of pulmonic valve insufficiency.
B. Significant coronary atherosclerosis with 90% stenosis of the proximal left anterior descending coronary artery and right coronary artery by complicated atherosclerosis.
C. Complicated aortic atherosclerosis (mainly infrarenal but focally involving arch).
D. Chronic tracheitis and bronchitis.
E. Bilateral serous pleural effusions (250 mL each side).
F. Hepatic chronic passive congestion.
G. Clinical history of dementia with clinically suspected vascular etiology.
H. Clinical history of acute and chronic state III kidney disease; prominent arteriolonephrosclerosis; several bilateral simple renal cysts up to 1 cm.
I. Sigmoid colon diverticula.
J. Partial thickness sacral decubitus ulcer.

III. Neuropathology Consultation from previous autopsy (JPC report 4116272-00):

A. Alzheimer Disease Neuropathologic Change: A3, B3, C3 (National Institute on Aging- Alzheimer's Association, 2012).
B. Cerebral amyloid angiopathy, slight.
C. Lewy body disease, neocortical (diffuse).
D. Scattered TDP-43-positive neuronal cytoplasmic inclusions identified in hippocampal formation and amygdala.
E. Intracranial atherosclerosis, slight; intracerebral arteriolosclerosis, slight.

IV. Toxicology (AFMES #190161):

A. VOLATILES: methanol, ethanol, and isopropanol detected in the liver.
B. DRUGS:
    1. Cyclobenzaprine detected in the liver (27 ng/g).
    2. Sertraline, memantine, and donezepil detected in liver by liquid chromatrography time of flight mass spectrometry; none detected in heart blood clot.

OPINION

This 81 year old Retiree, George Nelson Shaw, died of exogenous administration of insulin. Congestive heart failure, atherosclerotic cardiovascular disease, dementia, chronic renal disease were contributing factors. The findings of the previous autopsy are corroborated and represent significant natural disease. The toxicology screen is positive for cyclobenzaprine and artifacts of embalming.

Mr. Shaw experienced a significant hypoglycemic event on 26 March 2018 in which he had blood glucose levels of 17-40 mg/dL between 7:22 am and 9:53 am. He was not a diabetic and had no history of insulin administration or prescribed insulin injections. There was no natural etiology that would explain this degree of sudden hypoglycemia in a non-diabetic individual. Examination demonstrated four subcutaneous areas that were immunohistochemically positive for insulin and had corresponding fine polarizable crystals. These sites are consistent with insulin injection sites described in the literature.[1] These injection sites represent unprescribed exogenous insulin administration in a hospital setting, which provide an explanation for this hypoglycemic event.

Two additional injection sites on the left side of the abdomen were identified by the presence of larger polarizable crystals, but were immunohistochemically negative for insulin. These sites likely represent subcutaneous injection sites of medication during his hospitalization.

The hypoglycemic event occurred on 26 March 2018 and he died on 10 April 2018. Per review of the medical record and statements provided by the family, Mr. Shaw never returned to his clinical baseline between this hypoglycemic event and his death. Despite the length of time between this hypoglycemic event and his death, the medical record and family statements demonstrate that this hypoglycemic event was the precipitating event for his terminal clinical decline. Based on the investigative and autopsy findings, the manner of death is homicide.

URIBE.PAUL.SHANE.1176087826
Digitally signed by URIBE.PAUL.SHANE.1176087826
Date: 2019.07.03 15:10:15 -04'00'

Paul Uribe
LTC, MC, USA
Deputy Medical Examiner

[1] Lutz R, Pedal I, Wetzel C, and Mattern R. Insulin injection sites: morphology and immunohistochemistry. Forensic Science International; 90 (1997); 93-101.

DEFENSE HEALTH AGENCY
115 PURPLE HEART DRIVE
DOVER AIR FORCE BASE, DELAWARE 19902

Armed Forces Medical Examiner System

1 July 2019

TO:
MEDICAL EXAMINER
ARMED FORCES MEDICAL EXAMINER SYSTEM
115 PURPLE HEART DRIVE
DOVER AFB, DE 19902

Name: SHAW, GEORGE N.
SSN/DoD ID: 234-58-5436
Toxicology Accession#: 190161
Autopsy#: ME19-0013
Condition of Specimens: GOOD
Incident Date: 04/10/2018

REPORT OF TOXICOLOGICAL EXAMINATION

VOLATILES: The **LIVER** was examined for the presence of methanol, ethanol, acetone and isopropanol by headspace gas chromatography flame ionization detection with an ethanol reportable limit of 0.020 g%.

The following volatiles were detected:

	Methanol	Ethanol	Isopropanol
LIVER	Present	Present	Present

NF = "None Found"

DRUGS: The **LIVER** was screened for amphetamines, barbiturates, benzodiazepines, cannabinoids, cocaine, opioids, phencyclidine, sympathomimetic amines, acidic, neutral and alkaline extractable drugs by immunoassay, gas chromatography/full scan-mass spectrometry or liquid chromatography time of flight mass spectrometry. The following drugs were detected:

Positive Cyclobenzaprine: Cyclobenzaprine was detected in the liver by liquid chromatography time of flight mass spectrometry and confirmed by liquid chromatography tandem mass spectrometry. The liver contained 27 ng/g of cyclobenzaprine as quantitated by liquid chromatography tandem mass spectrometry.

Positive Sertraline: Sertraline was detected in the liver by liquid chromatography time of flight mass spectrometry. The heart blood clot was sent to NMS Labs for confirmation. Please see the attached external laboratory testing report for additional toxicological results.

DEFENSE HEALTH AGENCY
115 PURPLE HEART DRIVE
DOVER AIR FORCE BASE, DELAWARE 19902

Armed Forces Medical
Examiner System

REPORT OF TOXICOLOGICAL EXAMINATION CONTINUED (19-0161)

Positive Memantine: Memantine was detected in the liver by liquid chromatography time of flight mass spectrometry. The heart blood clot was sent to NMS Labs for confirmation. Please see the attached external laboratory testing report for additional toxicological results.

Positive Donezepil: Donezepil was detected in the liver by liquid chromatography time of flight mass spectrometry. The heart blood clot was sent to NMS Labs for confirmation. Please see the attached external laboratory testing report for additional toxicological results.

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NMS LABS

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Robert A. Middleberg, PhD, F-ABFT, DABCC-TC, Laboratory Director

CONFIDENTIAL

Toxicology Report

Report Issued 02/26/2019 13:00

To: **99090**
Armed Forces Medical Examiner, Div of Forensic
Attn: Jessica Knittel
115 Purple Heart Drive
Dover AFB, DE 19902

Patient Name NP
Patient ID 19-0161
Chain 19031238
Age Not Given **DOB** Not Given
Gender Male
Workorder 19031238

Positive Findings:

None Detected

See Detailed Findings section for additional information

Testing Requested:

Analysis Code	Description
7734SA	Special Request: Memantine in Tissue
7735SA	Special Request: Donepezil in Tissue
4195TI	Sertraline and Desmethylsertraline, Tissue

Specimens Received:

ID	Tube/Container	Volume/ Mass	Collection Date/Time	Matrix Source	Miscellaneous Information
001	Blue Plastic Container	7.15 g	Not Given	Tissue	DRIED HEART BLOOD
002	Homogenate Container	Not Given	Not Given	Tissue	DRIED HEART BLOOD

All sample volumes/weights are approximations.

Specimens received on 02/01/2019.

Detailed Findings:

Analysis and Comments	Result	Units	Rpt. Limit	Specimen Source	Analysis By
Special Request Finding(s)	None Detected			002 - Tissue	[Depending on request]
Memantine = None Detected Reporting Limit = 4.0 ng/g Analysis by Liquid Chromatography Tandem Mass Spectrometry (LC-MS/MS)					
Special Request Finding(s)	None Detected			002 - Tissue	[Depending on request]
Donepezil = None Detected Reporting Limit = 4.0 ng/g Analysis by Liquid Chromatography Tandem Mass Spectrometry (LC-MS/MS).					

Other than the above findings, examination of the specimen(s) submitted did not reveal any positive findings of toxicological significance by procedures outlined in the accompanying Analysis Summary.

Sample Comments:

001 Tissue specimen required homogenization: 19031238-001

002 NMS Labs generated homogenized Tissue sample: 19031238-002

002 Select testing may have been performed at: 200 Welsh Road, Horsham, PA 19044-2208

Chain of custody documentation has been maintained for the analyses performed by NMS Labs.

Unless alternate arrangements are made by you, the remainder of the submitted specimens will be discarded six (6) weeks from the date of this report; and generated data will be discarded five (5) years from the date the analyses were performed.

Workorder 19031238 was electronically signed on 02/26/2019 12:09 by:

Daniel S. Isenschmid, Ph.D., F-ABFT
Forensic Toxicologist

Analysis Summary and Reporting Limits:

All of the following tests were performed for this case. For each test, the compounds listed were included in the scope. The Reporting Limit listed for each compound represents the lowest concentration of the compound that will be reported as being positive. If the compound is listed as None Detected, it is not present above the Reporting Limit. Please refer to the Positive Findings section of the report for those compounds that were identified as being present.

Acode 4195TI - Sertraline and Desmethylsertraline, Tissue - Tissue

-Analysis by High Performance Liquid Chromatography/ Tandem Mass Spectrometry (LC-MS/MS) for:

Compound	Rpt. Limit	Compound	Rpt. Limit
Desmethylsertraline	400 ng/g	Sertraline	200 ng/g

Acode 7734SA - Special Request: Memantine in Tissue - Tissue

-Analysis by [Depending on request] for:

Compound	Rpt. Limit	Compound	Rpt. Limit
Special Request Finding(s)	N/A		